ABSTRACT OF THE DISCLOSURE

A system and method for unidirectionally or bi-directionally communicating information and data to and from an electronic module housed within a cordless power tool, over power terminals of the cordless power tool, while a battery pack of the tool is removed from the tool. A data transfer device is connected to at least one power terminal of the tool in place of the battery pack. The power terminal is also used for electrically connecting the battery pack to the tool during normal operation of the tool. A voltage supplied by the data transfer device to the tool is sequentially varied between a first level and a second level, in accordance with a predetermined communications protocol, to transmit data from electronic module of the tool to the data transfer device. A voltage signal applied to the electronic module of the tool is sequentially shifted between a first voltage and a second voltage to transmit data from the data transfer device to the tool. Thus, data can be transmitted between the tool and the data transfer device without requiring disassembly of the tool.